USGS
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Post-Wildfire Hazard Inter-Agency Group

Post Wildfire Hazard Reconnaissance Maps

Burn Severity in Action

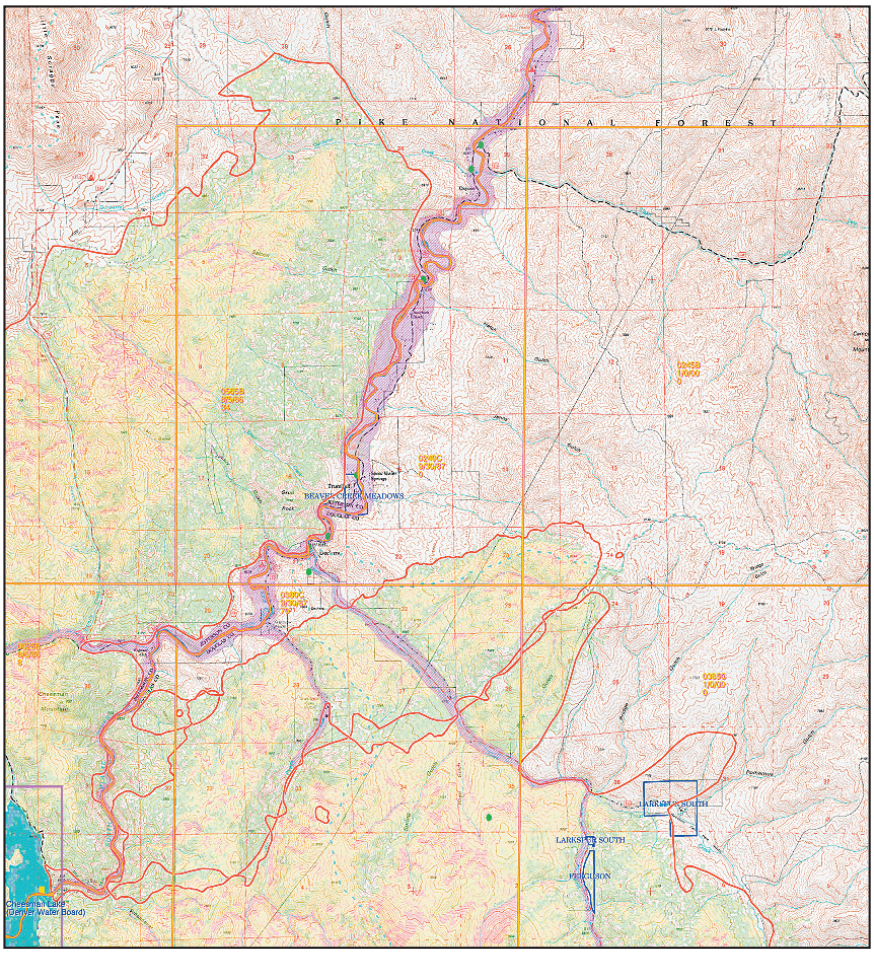
Reconnaissance Maps

As part of a statewide emergency management and response assessment for the Colorado wildfires of 2002, the USGS was tasked by FEMA and its collaborators to construct maps covering 16 of the most critical wildfire incidents. These initial products, called Post Wildfire Hazard Reconnaissance Maps, were used to assess the potential hazards related to the individual wildfire sites in order to arrive at a categorization for more detailed hydrologic analysis.

The prototype map depicted the fire burn perimeter and burn severity data (provided by the Forest Service and the EROS Data Center) overlain on topographic and planimetric base information. The purpose of the map was to show the location and proximity of the burn site to a variety of natural and man-made features and infrastructure. The USGS felt that the use of topographic and hydrographic information combined with burn severity data would provide the risk assessment team with key visual indicators of potential risk/damage to man made infrastructure from flood and erosional processes.

The reconnaissance maps include:

- Fire Burn Perimeters
- Burn Severity
- Highway Bridges
- Highway Potential Loss Dams
- Flood Insurance Rate Map (FIRM) Index
- Potential Hazard Areas
- Hypsography
- Shaded Relief
- Hydrography
- Hydrologic Unit Codes (watersheds)
- Transportation (Roads, Railroads & Pipelines)
- Subdivisions



Above - Is a representation of an isolated area of the Hayman Roconnaissance Map.

Environmental Impact

The Hayman Fire burned 137,760 acres of public and private land. It completely encompassed Chessman Reservoir, which is a major source of water for the Denver Metropolitan area.

Post-fire sediment and debris flow impact on Cheesman Reservoir pose a significant threat to Denver's municipal water supply. Areas of potential risk from landslides, flooding, erosion and associated hazards are delineated on the maps. This information is used to prepare mitigation plans to minimize the impact of post-fire events.

For More Information:

This geo-spatial information and the finished maps are also available on the Hayman fire recovery website:
http:/rockys20.cr.usgs.gov/hayman

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